

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Larry Kayser <lkayser@rideau.net>
Subject: Re: "New" 40 meter "net" freq?
Message-ID: <2.2.32.19970329183828.006a27cc@mail.rideau.net>

Sandy and Boatanchors:

>We need to try out and decide
>on a 40 meter QRG for the summer and daytime operation.
> 7050 has been beset with "Spanish" SSB 'phone stations (an old
>problem on 40
>since it was a CW only band!)

and

> I would begin to propose we choose some 5 khz multiple, at least at
>first.
>This would leave 7030, 7035, 7045. 7040 has been the long established QRP
>spot for years. Likewise 7030 is used for the same purpose in Europe. This
>would leave 7035 and 7045.

As a long time QRQ CW operator on 40 your heading into a significant problem.

7030 will get you a rough ride from the QRQ CW folks unless your running excellent filters. If the going gets rough the QRQ folks will tend to move in close to each other and rough it out, small folks would not survive very well.

7035 has been messed up for years now by some Packet folks who have moved into 7030 to 7040, they seem to come and go at times but even some of the QR0 and very big antenna CW fellows are unable to move them at times. You should note that ARRL has a band plan that encourages the digital folks into this area!

If 7030 is european QRP that is interesting as we hear a lot of weak CW from EA, G, DL, ON, PA around there but usually they are unable to hear even the big signal people.

7040 area is well occupied by QRP but this is the beginning of some VE2 SSB in French that despite some encouragement to move up above 7050 persists in the late afternoons and early evenings. I am suitably ashamed of my neighbours.

7045 to 7050 is usually not bad, W1AW does OK on 7047.5 or so.

The Spanish SSB extends from 7020 to 7050 and can be very hard to move out.

Any SSB DX contest will cause SSB as far down as 7015 with really big signals.

I would be careful about moving anywhere, 7050 is not that bad from my perspective in the North East...

Larry
va3lk / wa3zia

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: bjacob@iofc.com
Subject: ::::: BOOKS AND QST MAGS AVAILABLE << update >> :::::
Message-ID: <199703282302.JAA11558@iofc.com>

Here is what's left from the big book sale. Those that are not marked "SOLD" are now being offered for the price of postage only. I need to move these out, so if someone here does not claim them the next stop is the trash can. I really hate the thought of trashing these old books, so someone please send me \$2 or \$3 for each one, so that I can send them to you.

Here is the reprint of the original ad:

NOTE: These are NOT collector quality. Most have damaged covers (insect and/or rodent damage, staining, etc). I have tried to list the conditon as accurately as posible. These publications are useable if it is content that you are after, but they are not very "pretty" to look at.

::::: BOOKS :::::

MODERN RADIO SERVICING TECHNIQUE
Compiled by the editors of Radio-Craft
Paperback, 64 pages
Copyright 1
((((SOLD)))

RADAR ELECTRONIC FUNDAMENTALS
War Department Technical Manual TM 11-466
War Department, 20 June 1944
Paperback, 474 p

(((((SOLD))))

ELECTRICAL FUNDAMENTALS

War Department Technical Manual TM 1-455

War Department, 27 January 1941

Paperback, 155 pages

CONDITION: Cover rough (rodent/insect damage around the edges)
Pages are in good condition
Cover has been rubber-stamped once with the letters
S.C.R.T.S.

PRICE: << POSTAGE >>

LABORATORY MANUAL IN RADIO: Fundamental Principles and Practices

Francis E. Almstead, Kirke E. Davis, George K. Stone

Paperback, 139 pages

Copyright 1943, McGraw-Hill Book Company

CONDITION: Cover and pages are in good condition. Minor stains
around edges of front cover. Cover is becoming brittle
at spine fold.

PRICE: << POSTAGE >>

FUNDAMENTAL MATHEMATICS FOR BASIC TECHNICAL TRAINING

Training Div, Bureau of Naval Personnel, Navy Department

Paperback, 171 pages

Copyright 1942, United States Naval Institute

CONDITION: Cover and pages are in very good condition. Title
page has some insect damage.

PRICE: << POSTAGE >>

: :: :: QST MAGAZINES : :: ::

NOTE: These are NOT collector quality. Most are in pretty rough
condition, but are useable if you are interested in the content and
articles.

(((((SOLD))))

Jacob Worthington
AA4FM
Conway, Arkansas, USA

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Apologies to Dave Knepper
Message-ID: <UPMAIL03.199703292311100971@msn.com>

Hey Gang , I put my foot in my mouth again.
What I thought was a praise for all the help I have gotten on the list, I did say something questionable about Dave Knepper hiding behind Sandra's Mail I.D. This was meant to be a (Whatever). I am sure sorry that I offended Dave and I would like to say that it was unintentional.
My apologies, Dave.
Like Ben said onetime, Us Texan's got big mouths and some of us have little driving power behind our brains. (Namely Me).

Al
fritsche@msn.com

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Sandra L Knepper <slkst29+@pitt.edu>
Subject: Re: Apologies to Dave Knepper
Message-ID: <Pine.GS0.3.95L.970329215208.7968C-100000@unixs2.cis.pitt.edu>

No reason to apology, Allan. A great many folks get confused about my E-mail address. It really belongs to my daughter who is enrolled in a local college. She has Internet access as a student.

Hope this clears up the confusion.

Dave, W3BJZ
Publisher of the monthly Collins Journal

On Sat, 29 Mar 1997, Allan Fritsche wrote:

> Hey Gang , I put my foot in my mouth again.
> What I thought was a praise for all the help I have gotten on the list, I did
> say something questionable about Dave Knepper hiding behind Sandra's
> Mail I.D. This was meant to be a (Whatever). I am sure sorry that I offended
> Dave and I would like to say that it was unintentional.
> My apologies, Dave.
> Like Ben said onetime, Us Texan's got big mouths and some of us have

> little driving power behind our brains. (Namely Me).
>
> Al
> fritsche@msn.com
>
>

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: gcr2@po.CWRU.Edu (George C. Rybicki)
Subject: BC 348 Case wanted
Message-ID: <199703291609.LAA01502@piglet.INS.CWRU.Edu>

I traded for a BC 348 a few weeks back and got one good one and one parts rig.
I eventually got both working but have only one case. I would like to find a case
for the second one. Anyone out there got one they would sell? Tnx George

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: provero@connix.com
Subject: Boatanchors in Boston Globe
Message-ID: <199703301514.KAA08172@comet.connix.com>

The full text of the boatanchor article (originally
published 1/30/97 -- only took two months to propagate
down to the Southeast Connecticut hinterlands) is available for a fee
from:

www.boston.com

For free, you get to see the lead paragraph....

P.J. "Josh" Rovero	home:	provero@connix.com
Meteorologist	radio:	KK1D
Oceanographer	work:	rovero@sonalysts.com
Curmudgeon-at-Large	web:	http://www.connix.com/~provero/

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: provero@connix.com
Subject: Boatanchors in the News!
Message-ID: <199703301302.IAA00141@comet.connix.com>

Better get fully woken and coffeed before starting this Sunday's paper.
The Boston Globe's Nathan Cobb has done a huge piece (big headline, 8"

x 6" color photo, and 32 column inches of type) on Bob Eslinger of Pomfret, Connecticut. The title is "Rebirth for Old Radios".

The photo shows Bob and piles of radios, including at least 3 Hallicrafters general coverage sets mixed in with consoles, tombstones, cathedrals and AA5's.

The Boston Globe also has a web site, so those of you unlucky enough to not have this in your Sunday paper can probably still get some info on it.

P.J. "Josh" Rovero	home:	provero@connix.com
Meteorologist	radio:	KK1D
Oceanographer	work:	rovero@sonalysts.com
Curmudgeon-at-Large	web:	http://www.connix.com/~provero/

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: lsmith <ckvnfm@mb.sympatico.ca>
Subject: Broadcast Mikes FS
Message-ID: <333D922B.182C@mb.sympatico.ca>

Hello All:

Don't know if I made you the find of the century, or just blew my money! I found 2 microphones locally that would be perfect for BA's, and I bought them hoping that you would like to get them before they were turned over to someone who wouldn't appreciate them as much as a BA'er:

Astatic DN-50 low impedance dynamic made in Toronto. MINT condition, bought off the shelf during a clearout sale for \$45. The closest picture I have found on the web is at <http://www.garm.com/garmradio.htm> look under microphones, and see the Herald Crystal mdl M24A looks very similar to the Astatic. This has never been out of the box. Will pass it along for what it cost me plus shipping. Grill looks like it was designed by the same fellow that did a mid-50's Buick grill!

Next, an Electro-Voice model 636 wired for high impedance..can be low imp with wiring change..mike is in great condition, but the cord is rotten, and needs to be replaced. This was from a courthouse PA system apparently, and had been taken as a trade-in a long time ago, sat in the back of the shop unused. I've found a picture of it at <http://www.digitalvideo.com/mic/stan/mike29.jpg>
I paid the fellow \$50 for this one, and you are welcome to it for the same price, plus shipping costs. Your chance to pronounce sentence!

I'm already well fixed for broadcast type mikes, have about 6 now. All the best to all of you. Look forward to meeting some of you this year at Dayton. 73 de
Lee Smith
VE4ANC

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: don merz <71333.144@CompuServe.COM>
Subject: Bugs, Mic, Literature FS
Message-ID: <970330014415_71333.144_DHB31-4@CompuServe.COM>

Vintage Amateur Radio Gear & Literature For Sale

CONTACT: Don Merz, N3RHT: 47 Hazel Drive, Pittsburgh, PA 15228.
412-234-8819 (weekdays, EST or leave a message anytime).
71333.144@compuserve.com

GEAR

Vibroplex bug s/n 174287. Black powdercoat base, black fingerpieces, chrome parts. Square weight, triangular support for pivot. Some scrapes on paint. Good condition overall. \$95
Vibroplex bug s/n 241734. Gray powdercoat base, black fingerpieces, chrome parts. Round weight, upside-down U-shaped support for pivot. Paint is near-perfect. Needs cleaned but Excellent overall condition. \$105
Astatic Model 51 microphone. Stainless steel bullet mic with base for a conventional mic stand. Needs cleaned but this is a classy bullet mic. \$45

LITERATURE

1952 Cameradio catalog. Good. \$9
1955 Cameradio catalog. Good. \$9
1960 Cameradio catalog. Good. \$8
1962 Allied catalog. Cover damaged at spine. \$6
1957 Radio Shack catalog. Cover has some small dings at edges. \$7
1958 Radio Shack catalog. Cover crumbling in 2 spots. \$5
1962 Radio Shack catalog. Shows ear, but good condition. \$7

The Knight kit Tube tester original manual with oversize foldouts. Excellent. \$9
Paco Z-80 Audio-RF Signal Tracer Kit original manual. Very good. \$7

These ARRL Handbooks are all worn and not collector-quality.
1944 ARRL Handbook. Cover loose. \$8

1945 ARRL Handbook. Binding edge deteriorated. \$8
1954 ARRL Handbook. Well-worn. \$8
1959 ARRL Handbook. Cover decent but has about 5 loose pages. \$8
1963 ARRL Handbook. Dirty but good shape. \$8

1936 Radio handbook. No covers. PP 1-6, 285-290 missing. Still a fine refrence and a fun read. \$4
1959 Radio Handbook. 15th ed. Cover well worn. \$9

RCA RC-14 Receiving Tube Manual. Cover worn. \$9
RCA RC-19 Receiving Tube Manual. Cover worn. \$9
RCA RC-21 Receiving Tube Manual. Excellent. \$11
RCA RC-22 Receiving Tube Manual. Excellent. \$11

Tung-Sol Electron Tubes Characteristics Manual. 1957. 22nd ed. \$12
Sylvania Radio Tubes technical Manual. Loose leaf binder. 1951.
Very Good. \$22
Receiving Tube Substitution Guidebook Supplements 2,3, & 4 (3 books).
By H. A. Middleton. Very Good. All 3 books: \$7

NEED INFO: What radio was military key CMI-26003A used with? This key has a black powdercoat housing that encloses the works. Tall mushroom-shaped knob.

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Ethan Emeson <emesone@elwha.evergreen.edu>
Subject: cheap tubes
Message-ID: <Pine.ULT.3.91.970330034750.16412A-1000000@elwha.evergreen.edu>

Mostly JAN.
+ \$4.00 for packaging and shipping via USPS 2-3 priority mail
(assuming under 2LBS).

\$1 tubes:
12AL5
12AU6
12B4/A
5964
6AK6
6BC5/6CE5
6BJ6/E99F
6BQ7A/6BZ7
6BX6/EF80
6485/6AH6WA

\$2 tubes:

5963

6AU8A

6C4/EC90

6U8/A

6186

6919

\$3 tubes:

6BN8

6J5WGT

I've got lots more (ie too much)- let me know what you need.

Gladly consider trades (prefer them actually)..

--Ethan

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997

From: Don Reaves <dr@cei.net>

Subject: Colby KS Swapfest April 19

Message-ID: <Pine.LNX.3.91.970330100141.6813B-100000@kc5jh.reaves.net>

Don at the Bighorn Museum asked me to post this notice
of the Colby Kansas Swapfest scheduled for April 18-19.

Activities on the 18th begin at 6PM for an eyeball at
the Sirloin Stockade, followed by 8PM VE sessions and
table setup at the National Guard Armory.

The swap takes place on the 19th beginning at 8AM.
Don indicated there were usually good BA selections;
he will have 3 tables loaded with goodies from his
consignment shop.

Furthur details from Jim, KG0PI, 1 913 462 6436 or
jrobison@colby.ixks.com.

Bighorn Museum note:

Don continues to have email problems so if you have
a deal pending with him, don't rely on email.
I'm taking a trip there next weekend to pick up my
treasures. I have a little room left to transport
a boatanchor to Belton if anyone needs it.

Don Reaves WA5BBS dr@cei.net

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997

From: Jack Harper <jharper@bs2000.com>

Subject: Color Me Confused (Stagger Tuned IFs)...

Message-ID: <199703292130.0AA08132@lynx.csn.net>

Hello All...

I am still wrestling with my HQ-180 receiver that I recently went through with a fine toothed comb -- bad components etc -- and then 'overly' aligned. As previously mentioned, I aligned the IFs to precisely their quoted frequencies -- 3035, 455, and 60 Kc rather than 'stagger' tuning the things. As a result, the receiver is extremely sensitive (I really have this guy tweaked) and works wonderfully well -- except for audio distortion on the 3Kc (6 Kc -- with both sidebands) selectivity setting with AM. Various people have explained the errors of my ways to me -- that I have obviously tuned the IFs so tightly that I have zapped the audio response on wide-band AM/BC by squeezing the response skirts of the IF's too much thereby chopping off the higher frequency audio -- makes sense to me (though I had never heard of 'stagger' tuning before).

However -- I am a bit confused (not much new with that statement)...

The HQ-180 (above about 7Mc or so) is a triple conversion receiver with IF frequencies of 3035, 455, and 60 Kc (the lower frequencies eliminate the 3035 Kc IF). What is not clear to me is which stages to stagger tune out of the horde of transformer coupled stages (about eleven in all).

Reason (?) tells me that the first 3035 Kc stage should be tuned to precisely 3035 Kc if for no other reason than that a 6 Kc modulating audio signal would represent only about 0.2% of the total carrier frequency -- surely the tuned circuits would not have a Q that sharp -- surely all of the audio would get through that stage. My experiments with a signal generator late last night indicate that with the 3035 Kc 'cans' tuned to 3035 that signals from about 3025 - 3037 Kc pass through (response very rapidly drops off at those edges -- measuring with a VTVM connected to the output of the detector tube - V8 on the '180). So I think that my analysis is correct -- that I should tune the 3035 circuits to precisely 3035 Kc. Although I do wonder why the pass band for the 3035 areas is so wide (is 0.4% wide?) and so offset: 3025 - 3037 Kc -- perhaps I need (and will) retune that area... although the response seems quite flat... The thought did cross my mind that maybe I am loosing a chunk of the upper audio sideband by having the response fall off at 3037 Khz (But I would get, at least, all of the lower

sideband on AM)... Maybe if I shifted the whole thing 'to the right' by about 5 Kc...

Next I measured the response of the 455 Kc "middle" IF section (three cans) -- it is clear (actually, little is clear to me about this) that a 455 Kc signal will easily pass through (by measurement as above) this section modulated with a 6 Kc audio tone. Therefore, it seems to me that I should tune the 455 Kc cans to precisely 455 Kc -- the Q of these tuned circuits seems high enough to not zap the audio frequency edges to produce the distortion that I am seeing on AM...

Next I looked at the last 60 Kc IF section (six cans). Here I did find a rather sharp response:

58 Kc: -0.9 VDC (on the output of the detector tube)
59 Kc: -1.4 VDC
60 Kc: -26.1 VDC
61 Kc: -58.6 VDC
62 Kc: -45.1 VDC
63 Kc: -7.1 VDC
64 Kc: -1.4 VDC (Obviously, I am overdriving the thing -- but wanted to get a curve)

If you plot that you will see a fairly nice looking response skirt (I think -- although it is obviously offset by about 1.5 Kc -- is that my problem?). It also indicates to me that I should stagger tune the 60 Kc cans by about +/- 1.5 Kc...? The above 'chart' is, of course, in volts -- not decibels -- not really sure what that means either...

So -

Questions: (a) Am I correct that in a triple-conversion receiver that you should leave the higher frequency IF's tuned to precisely their stated frequency because the modulating signal (audio) is so small in frequency compared to the IF that it will definitely get through due to the relatively low Q?

(b) Am I correct that in this case (HQ-180) that I should stagger tune the last IF stage (60 Kc) by as above stated? In that section, there are three 'banks' of cans (two cans/bank for a total of six cans) -- I should tune the first two cans to 60 Kc; the second pair to say 61.5 Kc; and the last pair to 58.5 Kc to give me the 6 or so Kc passband that I think I am looking for?

(c) Am I correct that in a *double conversion* receiver (not the HQ-180) with the last IF stage at 455 Kc, that the Q of that stage, by design, is high enough to be able to chop the audio if you do not stagger tune the thing. But in a triple stage conversion with the 455 Kc IF being

the middle stage, that, by design, the Q of the 455 stage is set so as to pass the audio -- and that **always** it is the last (and lowest frequency) IF stage that needs to be stagger tuned to pass all of the audio?

Am I making sense with this? Perhaps I should 'leave my casing' and join the 'Heaven's Gate' people as they make their Trek to the big UFO that is apparently following comet Hale-Bopp -- maybe the 'Higher Authority' would be able to fill me in about stagger tuned IF's -- but that sounds a bit drastic -- it would irritate my wife (I think) and would probably upset the kid...

I very much would appreciate a bit of insight into all of this 'stagger tuning' business...

BTW -- one thing that I have learned is that when I align the IF's of a receiver in the future, that I will definitely actually plot on paper the response by frequency -- remarkable stuff to look at...

Regards,

Jack, KCOLR (Friend to all things Hammarlund -- and a bit confused)

Jack Harper
e-mail: jharper@bs2000.com
voice: 303-277-1892 fax: 303-277-1785

Bank Systems 2000, Inc.
350 Indiana Street, Suite 800
Golden, Colorado 80401 USA

"21st Century Financial Applications"
Optical Cards for Bank, EBT, and Medical Applications
Visit our Web Page: <http://www.bs2000.com/talos> (Last Update: 970312)

1024-bit PGP crypto key with ID: 8FB07075 created 960728
Fingerprint: 75 DA 06 35 F8 3D AC EC 3A F2 7C 59 A1 11 A5 74
Key available from Public Key Servers and above Web Page

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: "Grant Youngman" <nq5t@gte.net>
Subject: Re: Color Me Confused (Stagger Tuned IFs)...
Message-ID: <199703292317.RAA00949@smtp.gte.net>

Jack ...

Are you aligning the receiver per the instructions in the manual?

There is a contingent that supports stagger tuning of the 60 KHz IF in

the 180. I have owned six of these receivers and a couple of HC-10s , and have never stagger tuned the IF's. None have exhibited any distortion on AM signals (or any other signal for that matter) due to lack of stagger tuning.

So I'll stick my neck out and suggest that either you have not carefully followed the simple procedure in the manual, or you have some other problem. The sideband/selectivity switching circuits provide automatic tuning and coupling adjustments (i.e."stagger tuning") as you adjust the controls. Its possible that some component or other in that circuitry is way out of tolerance.

Also, once the 60 HKz IF is aligned and BFO adjusted, I've found it necessary to go back and reset the 395 KHz conversion oscillator "by ear" while switching between sidebands on a zero-beated signal.

The one place where a sweep generator and scope is necessary for alignment is in setting the phasing control on the 3035 KHz crystal filter in that IF. It can be done with a non-sweep generator and VTVM or scope, but is a bit tedious -- and in fact, you're probably better off just leaving well enough alone there.

(Two cents -- and worth every penny)

Grant/NQ5T

Grant Youngman / NQ5T

nq5t@gte.net
<http://home1.gte.net/nq5t/index.htm>
Double Oak, TX -- nr Dallas

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: Color Me Confused (Stagger Tuned IFs)...
Message-ID: <v0300782caf635abe3a26@[134.53.65.12]>

>So I'll stick my neck out and suggest that you have
>some other problem.
>Grant/NQ5T
>

I agree with Grant. For the record, I too had an AM distortion problem with my HQ180, and initially I suspected an alignment problem. Eventually, I found the problem to be in the AGC circuit, and unrelated to the IFs at

all (which I did not stagger tune.) The AGC circuit is quite complicated in the HQ180, and involves separate AM detectors, solely used for AGC control. Because of the circuit details it is possible for a malfunction in the AGC circuit (caused by a leaky capacitor, ordinarily) to couple distorted audio into the audio circuits. I can supply details to anyone interested.

73,

Jim Garland W8ZR

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: John Kolb <jlkolb@cts.com>
Subject: Re: Color Me Confused (Stagger Tuned IFs)...
Message-ID: <Pine.SC0.3.91.970329210233.14771A-100000@sd.cts.com>

On Sat, 29 Mar 1997, Jack Harper wrote:

> I am still wrestling with my HQ-180 receiver that I recently went through
> with a fine toothed comb -- bad components etc -- and then 'overly' aligned.
> As previously mentioned, I aligned the IFs to precisely their quoted
> frequencies -- 3035, 455, and 60 Kc rather than 'stagger' tuning the things.

I would disagree with stagger tuning the HQ-180. The manual calls for setting the bandwidth to 0.5 kHz, USB, applying a 60 kHz unmodulated signal and peaking for max. When the receiver is switched to other bandwidths, all those capacitors and resistors on the bandwidth and sideband selection switches should detune and broaden by loading the IF's as required to give the proper 6 kHz width.

I know, I failed to measure all those caps for proper value while I had the bandwidth switch out of mine, and not about to remove it again :) - I have heard those caps are prone to change value.

If you do stagger tune the IF, I'm sure you will mess up the CW and SSB bandwidths much more than you will help the AM bw.

John Kolb KK6IL

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Jeffrey Herman <jeffreyh@hawaii.edu>
Subject: CW offset in a KWM-2
Message-ID: <Pine.GS0.3.95q.970329115507.6147K-100000@uhunix3>

Jim W8ZR wrote: The KWM-2's CW note is really just an audio tone broadcast as a SSB signal...

Is this true? If an audio tone were being broadcast then wouldn't one be able to copy it with their BFO off? Wouldn't that be A2 (or MCW)? [Maybe I'm thinking of the situation where a carrier would be present, which isn't the case with SSB.]

Okay, suppose what Jim wrote is exactly what happens; does transmitting this audio tone on just one of the side bands make reception any different for a receiving op than when both side bands are used (as in the usual case)?

73, Jeff KH2PZ (a General for 21 years still asking Novice questions!)

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: "Rudolf H. Salomon" <rhs@pacbell.net>
Subject: Re: CW offset in a KWM-2
Message-ID: <333DAA7C.5EC9@pacbell.net>

Jeffrey Herman wrote:

>
> Jim W8ZR wrote: The KWM-2's CW note is really just an audio tone
> broadcast as a SSB signal...
>
> Is this true? If an audio tone were being broadcast then wouldn't
> one be able to copy it with their BFO off? Wouldn't that be A2
> (or MCW)? [Maybe I'm thinking of the situation where a carrier would
> be present, which isn't the case with SSB.]

> Okay, suppose what Jim wrote is exactly what happens; does transmitting
> this audio tone on just one of the side bands make reception any
> different for a receiving op than when both side bands are used
> (as in the usual case)?

When transmitting a single tone on SSB it's much like simply turning the carrier on and off as is the case with normal CW (no modulation, which would be MCW)

The carrier alone, in a normal CW transmission, does not generate sidebands. When transmitting CW with most transmitters, the transmitted

frequency is a single carrier frequency, that frequency indicated on the VFO or the Xtal of the oscillator in the transmitter.

Sidebands are generated as a process of the amplitude modulation, much in the same way as the mixer in your superhet receiver generates the sum as well as the difference of the incoming signal and the local oscillator signal, so the modulation generates sidebands which are the sum and difference of the carrier and the modulating tone.

When transmitting in SSB with a single audio tone, the carrier and the sidebands are generated inside the transmitter, but they are then filtered out or canceled out before they get out to the antenna, producing only the desired sideband, in the case of the KWM-2/A the upper sideband at 1750cps higher than the carrier frequency displayed on the VFO dial.

I asked the same questions when I got my KWM2A.

73 de Rudy Salomon - KD6NRQ

> 73, Jeff KH2PZ (a General for 21 years still asking Novice questions!)

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: Re: CW offset in a KWM-2
Message-ID: <v0300782baf6355be0d81@[134.53.65.12]>

Jeff KH2PZ writes, in response to an earlier posting of mine:

>Jim W8ZR wrote: The KWM-2's CW note is really just an audio tone
>broadcast as a SSB signal...
>
>Is this true? If an audio tone were being broadcast then wouldn't
>one be able to copy it with their BFO off? Wouldn't that be A2
>(or MCW)? [Maybe I'm thinking of the situation where a carrier would
>be present, which isn't the case with SSB.]

Hi Jeff,

When an audio tone is passed through a single sideband suppressed carrier transmitter, the transmitted signal appears to be a pure carrier, which is displaced in frequency from the suppressed carrier by the audio frequency. In other words, if the dial of your KWM2 (which we'll assume was in the USB mode) was set at 14000.0 KHz, and a sidetone of 1.5 kHz was injected into the microphone preamplifier, the resulting r.f. signal would

be a carrier at 14001.5 kHz. If the KWM2 was in the LSB mode, the signal would be a carrier at 13998.5. If the KWM2 could transmit double sideband suppressed carrier (it can't), then the sidetone would appear as two "carriers", one at 13998.5 and the other at 14001.5. If the KWM2 could transmit ordinary AM (double sideband, carrier present), then there would be three "carriers", the third being the "real" (unsuppressed carrier) at 14000.0

>From the point of view of the listener, the resulting transmitted signal from a CW sidetone injected into an SSB transmitter is indistinguishable from a CW signal generated by keying the carrier on and off in a conventional transmitter. (For the mathematically inclined, an audio tone broadcast as an SSB signal is a pure sine wave, displaced in frequency by the suppressed carrier frequency.)

73,

Jim Garland W8ZR

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Allen Tucholski <allent@en.com>
Subject: FS National NC-188 Receiver
Message-ID: <3.0.1.32.19970330095540.008903a0@en.com>

Hello all,

I have a very nice National NC-188 general coverage receiver. It is a 9.5 on a scale of 10.

The cabinet has a few minor scratches from normal use. No dents or holes. Coverage is 525 KHz to 40 MHz in 4 bands. has nice large slide rule dials. one for main tuning and the other for bandspread. The front panel is near mint . Has a nice S Meter. Has a BFO.

It is a very sensitive receiver and works well. the tubes are new, and it has been aligned.

I do not have the original speaker. You will need to use your own. or I can throw in the one I have been using for \$5.

\$125 + shipping from zip 44125

Allen

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997

From: "D. Ragsdale" <doragsda@polymail.cpunix.calpoly.edu>
Subject: FS: 30's - 40's Test Equipment
Message-ID: <199703291919.LAA03214@monet.artisan.calpoly.edu>

Have the following test equipment from the 30's or early 40's:

RCA Model 151 "Cathode Ray Oscillograph" - 1 inch o'scope. Uses the following tubes: 80, 6C6 (x2), 885, 913 CRT. Condition good to very good - line cord has been replaced, needs a good exterior cleaning, all knobs original and nice, handle intact, chassis clean. Not tested electrically.

Weston Capacity Meter model 664 (capacitor tester) with power cord and leads. Pictured on page 136 of the 1935 edition of Ghirardi's "Modern Radio Servicing". Condition very good - excellent.

Weston Selective Analyzer Model 665 Type 3. VOM. Pictured on page 324 of the above book. No leads. Condition V.G

(Both of the above Weston meters have a tag on them referring to their being part of Navy OE-12 radio equipment and their serial numbers match.)

Simpson 220 Roto Ranger Tube Tester / voltmeter / ohmmeter. Electronics and front panel are very nice. Meter dial changes mechanically as you rotate setting knob. Meter glass is cracked but it's just a simple square piece and easy to replace. The cloth covered case for this is in poor, poor shape. Plywood is falling apart. You could glue it all back together, I think, if you're real ambitious, but it would probably be better to just make a new wooden case. This tester came with a globe shaped 01A inside it (tube was a dud, it doesn't have a tube in it now)- I have no paperwork on setting this up, so I don't know if it works. I stuck a '30 tube in it and the pilot light came on and nothing smoked!

I'd like to try to sell all of the above as one lot for \$150.00 plus shipping from zip 93401. I don't want to break it up at this time.

David Ragsdale
doragsda@oboe.calpoly.edu

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: W9zr@aol.com
Subject: FS: Original SX88 Manual
Message-ID: <970329144555_-569240268@emout02.mail.aol.com>

I have an original SX88 manual in excellent condition available. Not sure what it is worth so will offer to the highest bidder by Thursday April 3. I hope this is fair to all who might have an interest.

73 Randy

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: "H. Dave meitzen" <hdmeitzen@champion.aclic.com>
Subject: FS: SP600, FRR-3, Collins 180-S1
Message-ID: <333D6AEE.67D1@aclic.com>

The SP600/R-274-A/FRR works like a champ. The RF deck has been recaped. The cosmetics are a 6. Imminently restorable. Nothing is bent no mods extra holes etc.

It needs a cleanup and the front panel needs a paint job. Since the lettering is engraved this is not a big deal. I would do it but I bought a fully restored unit - for twice what I am asking for this unit. In addition it comes in a military style carrying case. The case has large folding handles on the side and the top opens. 10.5 inch rack mount. Someone repainted the case but not very well. (Didn't strip it) The whole setup looks cool. \$380 plus shipping (remember this is a boatanchor)

FRR-3 - this is a module based general coverage receiver. It comes with four modules and covers 2-32 MHz. Modules are FFRD-5 2-4mhz, FFRD-6 4-8mhz, FFRD-7B 4-8mhz, FFRD-8B 16-32 MHz. The actual receiver is 5.5 inch rack mount. The four modules have a separate 10.5 inch rack mount container. You pull the module you want to use out of the 10.5 inch rack and push in to the receiver. The cosmetics are a 8 and with very little clean-up (no painting, etc.) the unit can be brought up to 9.5. In addition, the units are mounted in a aluminum wood trimmed 48 inch standard RETMA rack. This unit will also cleanup to a 9.5 without much work. The receiver includes a remote tune function. Someone designed a home-brew remote RIT tuner that is also included (The receiver also has tuning and many other controls. By the looks of the unit it was mfg. in early 60's. The equipment has NOT seen hard service. \$360 plus shipping with rack this is about 60lbs.

Collins 180-S1 1000 watt antenna tuner. Cosmetics are a 7. Very restorable. I have not tried it out. Tuners don't have much that can go wrong. The unit exhibits the normal Collins craftsmanship. Multiple reduction

dials, etc.

Reproduction manual with it. \$340 plus shipping.

Regards

Dave

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997

From: "Rudolf H. Salomon" <rhs@pacbell.net>

Subject: GRC-109 Book

Message-ID: <333D72C0.7D47@pacbell.net>

Hi all!

Just got finished reading a very interesting and entertaining book about a Special Forces team in Vietnam during 1963. There is mention of the AN/GRC-109 and the PRC-10 radios.

Seems the fellow who wrote this, " TAN PHU, Special Forces Team A-23 in Combat" (its in paperback, published by Ivy books), Leigh Wade, was a special forces radio operator during his all expense paid tour of Vietnam in 1963. There is a nice photo of him in the village commo bunker with the GRC-109 mounted in makeshift wooden racks so that all the components are vertical on a plywood desk/op. position. He is wearing what look like the WW-11 HS-23 headphones with the chamois cushions.

He was not to happy with the capabilities of the GRC-109 or the PRC-10.

He was in a position where his support group was to close for communication via skip but to far for real solid communication via ground wave with 15 watts out from the GRC-109.

Also mentions the difficulty of tuning the PRC-10. I have read about this in another book by Nick Rowe(5 Years to Freedom) who was later killed by terrorists in the Phillipine Isl. He talks about trying to do a calibration while coming under fire. The PRC-10 has a spring loaded "CAL" position on the main function switch. When you calibrate the set, you need to hold the switch in the "CAL" position with one hand, tune with the other while listening for the zero beat in the handset which you have squeezed against you ear with one shoulder. I can see where this would be particularely nasty while in a combat situation.

Anyway, a very interesting book. I recommend it. I got mine at Crown Books.

No connection with the author or the publishers, just a really interesting read, especially for those interested in the history of the

BAs that we collect.

73s de Rudy Salomon - KD6NRQ

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997

From: "Mark J. Blair" <mblair@gruumsh.irv.ca.us>

Subject: Re: GRC-109 Book

Message-ID: <199703300528.VAA03665@gruumsh.irv.ca.us>

rhs@pacbell.net wrote:

> Also mentions the difficulty of tuning the PRC-10. I have read about
> this in another book by Nick Rowe(5 Years to Freedom) who was
> later killed by terrorists in the Phillipine Isl. He talks about trying
> to do a calibration while comming under fire. The PRC-10 has a spring

I sure feel sorry for anybody who had to carry one of those in combat!
I have a PRC-10 and PRC-10A. They're interesting radios from a
collecting standpoint, and it's pretty neat how they crammed so much
radio in such a small place with the technology of the day. They're
also bulky, heavy, very uncomfortable to wear (unless your spine is as
flat as a plank!), and you can't get at the controls very well while
wearing it (I guess you can get at the volume and squelch if you're
limber, but forget about trying to change the tuning!). Once I got
bored and decided to try strapping on one of them. It took me about an
hour to get all of the straps adjusted just right, and it's not easy
to get it on without tangling up the straps (even when not under
fire). I'm not a military guy, myself (I just like playing with their
toys!), but I suspect that radios like the PRC-10 made an otherwise
horrible experience even worse. :-)

--

Mark J. Blair KE6MYK

e-mail: mblair@gruumsh.irv.ca.us

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997

From: K1EL@aol.com

Subject: Heath HP13/23 Power Supply Info

Message-ID: <970329162705_1615595806@emout07.mail.aol.com>

Anyone have the particulars on configuring the HP23 and HP13 power
supplies for low voltage (250VDC) opeartion ?

Thanks, Steve K1EL

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: kb5wwwo@juno.com (George Folse)
Subject: Help with 572B's
Message-ID: <19970330.094735.5039.1.kb5wwwo@juno.com>

Hello All,

I am having a problem with my Gonset GSB-201 Mark IV amp. It uses 4 572B tubes. I have a rattling noise which seems like it is coming from the tubes. It gets real loud at times and sometimes it goes away. I use a piece of wood dial pin and placed it on the tubes and could feel the vibration. I did the same to the transformer, and no vibration there. All in all the amp. works fine. I use it with my Ranger with 400w output. The noise does not change even when I tx or rec there is no change in the noise level. Thanks for the help,

George Folse KB5WWO kb5wwwo@juno.com
630 Dolhonde St.
Gretna, La. 70053
504-362-1896 ph/fax
Collector of Heathkit, EF Johnson, and Atwater Kent AMI#937

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: jeffa@ix.netcom.com (Jeff Anderson)
Subject: Help! SX-28 Questions & Needs...
Message-ID: <199703292340.RAA28449@dfw-ix2.ix.netcom.com>

I'm trying to restore an SX-28 receiver that I recently purchased, and have come across a real head-scratcher: I cannot get the S-meter to operate properly, and I can't figure out what's the problem.

When I operate the S-meter (AVC ON), the meter operates *backwards*. That is, with no signal the meter reads high (needle at the right-side of the scale), and then, when a signal is applied, the needle swings *left*, towards S1 - the stronger the signal, the further left the needle travels.

Of course, the meter's operation should be just the opposite - the needle should normally sit at the left side of the meter, and then move to the right as signal strength increases.

Looking at the schematic, though, it looks like the meter is doing exactly what it should be doing, as crazy as that is. The S-Meter amplifier (6B8) is controlled by an AVC voltage (also developed in the same 6B8). This AVC voltage becomes more negative with signal strength, and it is applied to the grid of the S-Meter Amplifier. This means that this grid will go more negative with signal strength, and therefore less current will flow through the tube (we are driving it

towards cut-off). Less current flow in the plate ckt means less voltage drop across R28, the resistor in the amp's plate circuit across which (in parallel) the S-Meter is placed. Less voltage across R28 means less needle deflection. In other words: For no signal we get full-meter deflection (big V drop across R-28), and for a large signal we get little meter deflection (small V drop across R-28).

This, of course, means the meter is going to read the *opposite* of its scale (left scale = S1, Right = S9+), which is exactly what its doing.

Why the heck is this happening? Have I analyzed this incorrectly? The analysis "seems" correct, and the meter performance matches the analysis, but its operation ain't right! Any ideas?

The sole clue that I have is that someone was in the S-Meter circuit before me, and the S-Meter itself has been opened up for unknown reasons. Could it be that Hallicrafters had a *special* meter movement for the SX-28 whose needle moves to the *right* (up-scale) with smaller voltage? Maybe some previous owner replaced the original meter movement with a different, 'normal' one (while keeping the same face-plate), thereby bollixing up its operation...

Does anyone have a spare S-Meter, or know a source?

Next tasks include full alignment and front-panel repainting (there's some light rust in the lettering indents and the "crackle" indenting) - any ideas on how best to remove the paint & refinish?

Many thanks,

- Jeff, WA6AHL

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Al Klase <skywaves@bw.webex.net>
Subject: Re: Help! SX-28 Questions & Needs...
Message-ID: <333DE4F4.7317@webex.net>

Jeff Anderson wrote:

>

> When I operate the S-meter (AVC ON), the meter operates
> *backwards*.....

> Could it be that Hallicrafters had a *special* meter
> movement for the SX-28 whose needle moves to the *right* (up-scale)
> with smaller voltage?

Exactly right! The SX-28 as well as the SX-24 and 25 use meters that rest on the right side when the power is off.

--

Al Klase - N3FRQ
skywaves@bw.webex.net
Flemington, NJ

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Bill Meara <wmeara@erols.com>
Subject: Help: DX-60B Bandswitch Problem
Message-ID: <199703301321.IAA01404@smtp2.erols.com>

Anchorologists:

While pondering the complicated mod that had been done to my recently acquired DX-60B, it occurred to me that I should consult Chuck Penson's Heathkit Book to see if there are any references to mods made on the bandswitch. Sure enough, Chuck's excellent "Product References" section shows several magazine articles that may explain what was done to this transmitter.

On page 43 of the Sept 87 QST there is an article on DX-60B Bandswitch replacement.
On page 48 of the Sept 88 QST there is another article on the the same subject.

I don't have these editions of QST. Is there anyone out there who could take a look at these articles and let me know what was going on? If there was a good reason for the mod and if it really resulted in better performance, I'll keep it in the circuit.

Thanks!

73 de N2CQR
Bill Meara
Hallicrafters, Heaths and Hammarlunds
QTH: Falls Church, Virginia, USA
Formerly of Tegucigalpa, Bilbao and Santo Domingo
wmeara@erols.com
<http://www.mindspring.com/~johnmb/billm.htm>

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: lsmith <ckvnfm@mb.sympatico.ca>

Subject: HRO Coils FS

Message-ID: <333D97E3.3516@mb.sympatico.ca>

Continuing to make room for more BA's here at the radio station, and these are duplicates for me. If I can help you out with any that you need, let me know.

100-200 kc
.9-2.0 mc
1.7-4.0 mc bandspread for 80 metres
1.704.0 mc no bandspread
3.5-7.3 mc bandspread for 40 m.
7-14 mc bandspread for 20m.
7-14 mc no bandspread
14-30 mc bandspread for 10 m.
14-30 mc no bandspread

Also have (2) HRO dials and almost complete type PW capacitor banks with gear boxes. Both are missing a small spring which seems to operate the dial counter mechanism, and need cleaning.

Would like to get your offers on these, either individually, or as a package. 73 de

Lee Smith

VE4ANC

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997

From: gpewitt@execpc.com

Subject: New (to me) radio

Message-ID: <Chameleon.970329192656.gpewitt@execpc.com.execpc.com>

My new R-1050B just arrived and it's a beauty. Thanks Joe. Looks and works like new. And, wonder of wonders, it came with an original maintenance manual. 2 inches thick with foldouts 5 pages wide. I'd say it's a boatanchor, it weighs 70 lbs and has two tubes. It even came with two mil speakers and the right power connector. The only thing missing is a user's manual. The maint manual doesn't cover the real basic stuff. Soooo if anyone has one or a copy or a source for one I'd love to get one. Anyone else using one? Got any good stories? Thanks and 73 Gary

Name: Gary Pewitt N9ZSV/KT

6120 W. Calumet Rd. Apt 204

Milwaukee, WI 53223

414 355 8147 Home 414 297 4307 Work

E-mail: gpewitt@execpc.com
From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: gpewitt@execpc.com
Subject: Re: New (to me) radio
Message-ID: <Chameleon.970329222544.gpewitt@execpc.com.execpc.com>

Mort,

I got it from a list member who advertised it and some other gear. I paid \$350.00 for it. Fair Radio has them for about \$650.00. Mine is in superb condition. I think the main difference in the model numbers is the manufacturer. I believe they were made clear up to the middle '80's. It's in Moore's book on receivers, made by General Dynamics for the navy. Sure is interesting to hear that motor drive change the frequency when you set the digit knobs. It has 48 crystals in it and it's all synthesized. All modular construction. It is hardened against electro magnetic pulse. There is a relay in the antenna circuit that cuts out at anything over 15 volts. The two rf stages are tubes, also to resist the pulse from nukes. It's definitely not a band cruiser what with the decade knobs but when you set it on a frequency, it's there. I think that's about the newest receiver that I'd be interested in. The newer stuff is too complicated and I don't think it's really all that much better. It certainly isn't worth the prices they are getting nowadays. A new \$30,000.00 receiver isn't any better than a 390A especially after Rick Mish gets done working it over. My period of interest runs from about ww2 till about 1980 at latest. That was the golden age of radio in my opinion. I would like to try some of the good military regens I keep hearing about but that's about the earliest for me. Differing opinions welcomed. 73 Gary

On Sat, 29 Mar 1997 19:50:22 -0500 Mort Denison wrote:

>Gary,
>
>Where'd you get it and how much do they run? I've been
thinking about
>getting one. What's the difference between the 'B' version
and the 'G'
>version?
>
>Thanks,
>
>Mort Denison
>

Name: Gary Pewitt N9ZSV/KT
6120 W. Calumet Rd. Apt 204
Milwaukee, WI 53223
414 355 8147 Home 414 297 4307 Work
E-mail: gpewitt@execpc.com
From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Robert Nickels <ranickel@mwci.net>
Subject: Paint, finally...
Message-ID: <333D70E5.121D@mwci.net>

At last, matching (I hope!) paint for BA gear is becoming available. The folks in the paint dep't of local stores will miss me staring at the shelves...

From: REHummel@aol.com:

> Tell your friends, EF Johnson, On the way, both Marroon, and Grey, > and, Hammerlund, and some more Heath colors PLUS,
> we are also making Kenwood and Yaesu.. Icom is going to be a problem
> Too many variations WITH EVERY CABINET!! Can you beleive it??
> and, Hallicrafters paint, will be a problem too, too many different
> shades..I think the most popular will be the SR-160/SR-150 Grey, and > maybe the SX-99 grey...

Contact Rob at REHummel@aol.com for details. He announced Heath green paint this week via newsgroup posting and is probably open to suggestions/wants.

73, and happy painting,

Bob W9RAN

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Jeffrey Herman <jeffreyh@hawaii.edu>
Subject: Phoenix xtals offers group-buy of xtals
Message-ID: <Pine.GS0.3.95q.970329114351.6147J-100000@uhunix3>

Just received a note over the GlowBugs list that the owner of Phoenix xtals is offering, for \$24, a five-pack of xtals consisting of 7030, 7035, 7040, 7045, and 7050.

He's also offering a seven-pack for \$33 that includes the above plus 7055 and 7060.

He's also offering five- and seven-packs for the Novice sub-band.

All xtals are in FT-243 holders.

Just another reason to subscribe to GlowBugs!

7.3W, Jeff KH2PZ

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: bgraham@tecnet1.jcte.jcs.mil
Subject: Re: Plugs for Cheyenne
Message-ID: <199703291751.LAA09921@uro.theporch.com>

You can get the "jones plugs" for the Cheyenne from Allied
and they are fairly cheap. If I remember correctly DigiKey also
carries them.

Look under "cinch" in the manufacturers' index.

73

Bill

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Stephen Dobak <SDobak@ptd.net>
Subject: Re: Question on Drake T-4B
Message-ID: <Pine.LNX.3.93.970330093501.671B-100000@dobak.ptd.net>

On Wed, 26 Mar 1997, w7fg wrote:

> This past weekend I ran across a large number of new manuals for a
> Drake T-4B. Anyone ever here of it being produced?? It looked like
> the T-4 in that there was no Xmit Freq control. Time didn't allow
> me to study the manuals in depth, but caught my eye. Now the
> question lingers, what was it....

>

> Gary

>

>		W7FG Vintage Manuals	
>		3300 Wayside Drive	
>		Bartlesville, Oklahoma 74006	
>			
>		Telephone: 918-333-3754	
>		Orders Only: 800-807-6146	
>			

```
> | HomePage: http://www.w7fg.com |
> | E-Mail w7fg@w7fg.com |
> -----
>
>
```

Drake make the "reciter" which was a separate transmitter which used the receiver vfo!

```
/-----\ /-----\
| Shamokin: Where the birds fly upside | Steve Dobak |
| down, since there isn't anything in | WB3AMG |
| this town worth shitting on. | :- ) |
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
```

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: provero@connix.com
Subject: R-1051 (A-G)
Message-ID: <199703301315.IAA00878@comet.connix.com>

There are some definite differences in the 1051 letter suffixes. Early models had a vernier or fine tuning that covered +/- 1 KHz from the window.

Later models had a "vernier" that had 9 x 100 Hz steps on the knob (not windowed like the other digits) plus a variable position.

And as I noted to Gary Pewitt in e-mail, R-390 wrist is *NOTHING* compared to the repetitive stress injuries you'll get from bandscanning with a R-1051!

One other note, the 1051's use the military standard of the SSB "Window Freq" being offset 1.5 KHz from the signal's carrier frequency.

My first experience with the 1051 (A and B) was in 1977 as a shipboard communications officer, my last with the G and H in 1991 as a commanding officer of a deep ocean survey unit. On the first ship we used a R-390A for casual listening, on the last a 51-S1 (from surplus at the USAF base south of Cape Canaveral). You just don't use a R-1051 for casual band scanning.

P.J. "Josh" Rovero	home:	provero@connix.com
Meteorologist	radio:	KK1D
Oceanographer	work:	rovero@sonalysts.com

Curmudgeon-at-Large web: <http://www.connix.com/~provero/>

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: w2ec@VNET.IBM.COM
Subject: R-390A help needed
Message-ID: <199703291844.SAA01061@sco.theporch.com>

Just dug out one of my spare R-390A's to see how well it worked. I've found most bands work real well, while a few don't work at all. The bands that are working, are working fine with good sensitivity. The other bands appear dead. Before I start digging too far into this radio, are there any suggestions on common trouble spots to look for that would cause some bands to be working fine and others to be dead? The bands that are not functioning are 6, 11, 13, 15 25 and 29mc. All other bands work fine. Any common problem that ties these non-functioning bands together? Any other ideas about what would cause some bands to be dead and others OK?

73, Ray W2EC

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Allen Tucholski <allent@en.com>
Subject: R-48/TRC-8 (220Mhz FM) FS
Message-ID: <3.0.1.32.19970330101155.0088f200@en.com>

I have a R-48/TRC-8 receiver (230- 250 MHz tunable) Near mint condition. I retuned the osc for 220 operation to listen to the ham bands. Tis is a very simple adj.
All other adjustments original. All the tubes have been tested good. Very good condition and fully operational. The unit is heavy (75 lbs)
The receiver is a 9 on a scale of 10. Has a function meter to monitor various Ma and voltages within the receiver. The unit is a little smaller than a moder microwave oven. It has rack handles on the front.

I would prefer local pickup in Cleveland Ohio, or within 50 miles.
216-883-3879

\$80

Allen

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: w2ec@VNET.IBM.COM

Subject: Re: R390A help needed

Message-ID: <199703300304.DAA05058@sco.theporch.com>

Several people responded about how bad crystals or witch contacts could cause the symptoms I was seeing. Sure enough, the 6mc and 15mc problems were ditry band switch contacts. The 11mc/25mc problem was a bad 14mc crystal, and the bad 13mc/29mc problem was a bad 16mc crystal. Pulled some crystals from one of my parts 390A's, plugged them in, did the "de-oxit" thing to the band switch and the rcvr is running fine now. Just finished an alignment and it's working super. Thanks for the advice, saved me chasing thru the schematic trying to figure the correlation between 11/25 mc and 13/29 mc. Been so long since I've worked on one of these, forgot about the crystal pairing.

73, Ray W2EC

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997

From: n4bno@juno.com (James R Bridgers)

Subject: RCA 866 A tubes

Message-ID: <19970330.072333.5087.1.n4bno@juno.com>

Hello all.

I have recently received eight RCA 866A tubes and I have no need for them. I'm wondering if anyone out there may need them. If you do please contact me direct at:
n4bno@juno.com

Another Drake Collector:

Rodney N4BNO

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997

From: vancleef@netcom.com (Henry van Cleef)

Subject: S-meters (was SX-28 questions)

Message-ID: <199703300556.WAA10785@netcom2.netcom.com>

As Jeff Anderson discourses

>

> I'm trying to restore an SX-28 receiver that I recently purchased,
> and have come across a real head-scratcher: I cannot get the S-meter
> to operate properly, and I can't figure out what's the problem.

>

> When I operate the S-meter (AVC ON), the meter operates
> *backwards*. That is, with no signal the meter reads high (needle at
> the right-side of the scale), and then, when a signal is applied, the
> needle swings *left*, towards S1 - the stronger the signal, the further

> left the needle travels.

>

> Of course, the meter's operation should be just the opposite - the
> needle should normally sit at the left side of the meter, and then move
> to the right as signal strength increases.

>

This is a sign that someone has replaced the meter with a left-zero meter and reversed the connections to the meter to make it read on-scale.

You can replace an S-meter with almost any meter, 1 ma. or less, and use a left zero meter on a set like a Hallicrafters that originally used a right zero meter. You can also rework the circuit easily to run the whole thing at low voltage rather than having B+ all over the place. You can even add an S-meter to a lowly S-38 if you want to.

All of the S-meter circuits I have seen are quite simple Wheatstone bridge circuits. They measure either the plate or the cathode current of the last IF. Take the circuit as shown on the schematic and redraw it as a traditional Wheatstone bridge, and the operation generally becomes obvious quite quickly. In the Hallicrafters right-zero setup (Halligan must have gotten a bargain on right zero meters) one resistor of the four is missing from the schematic. That is equivalent to a "lots of megohms" resistor in that position. If you redo the bridge, put a resistor in that position such that the reference side of the bridge (has the meter zero rheostat in it) is lower voltage than the driving side (shunts the plate current in a Hallicrafters setup), and reverse the meter connections, the meter will read normally. You will have to adjust resistances and calibrate your new meter. The cathode current of most variable cutoff pentodes (6D6, 6J7, 6SJ7, 6BA6) is normally set around 11 ma. with zero volts on the grid, and three volts of initial bias provided by a cathode resistor. This works out to about 8 ma. I_b and 3ma I_{c2} . When the bias is increased (negative voltage on the grid) by AVC action when you get a signal, the cathode (and plate and screen) current goes down. These are DC levels (with the signal riding on top of them). With 1000 microvolts of signal at the antenna, most AVC setups will put about -10 volts on the AVC line, and the final IF pentode will drop to around 3 ma. of cathode current. You've got plenty of swing to work with.

I far prefer to monitor cathode current, as it is near ground, and much easier to set up for stability than a full Wheatstone bridge in the place circuit. (Actually, Hallicrafters used the setup they did because B+ generally wanders all over the place, and a full Wheatstone was not stable enough). You will want to remember our friends Mr. Kirchoff, Mr. Thevenin, and Mr. Norton. A Norton analysis of the

Wheatstone bridge is best, as it deals with currents, and meters work on current. You'll need to know the full scale current and internal resistance of the meter you are working with. Most cheap meters (and you are using a cheap meter, aren't you---quite adequate for the job) have around 250 mv. across the terminals at full-scale current.

The Wheatstone bridge setup for a cathode current circuit is easy to lay out. One pair of resistors (left leg of the Wheatstone, connected to meter - terminal) serves as the cathode self-bias resistor for the tube. The other pair of resistors (right leg, intersection connected to the meter + terminal) runs from a current source and has a fixed nominal voltage at the intersection that matches the voltage on the left (negative) intersection with zero signal on the tube. When the radio gets signal, and the AVC goes active, the current through the left leg will drop as the tube heads for cutoff, and current will flow from the reference leg into the bias resistor leg, and move the meter upscale. The bottom of both Wheatstone legs is commoned to ground. Note that the top of the Wheatstone legs are not connected together. One runs to the final IF cathode; the other runs to a "handy positive current source."

Rather than using B+, regulated or unregulated, as a "handy positive current source," I suggest one that is low voltage, quite stable, and even handier: the output tube cathode(s). As I recall, an SX-28 has a pair of 6V6's biased quite high in the class A region with a 220 ohm resistor giving something like 15 volts of bias. This particular voltage is very stable because 6V6's (like most power beam tetrodes) have fairly high transconductance, and the bias point doesn't change very much, even with large changes in screen voltage, which is the primary control of quiescent current in any tetrode or pentode. Work out your resistances on that side to give a reasonably low impedance at the meter + terminal, and put the zeroing pot (use a wire-wound---this is DC, which carbons don't like) in one of the legs, making sure to wire it so the zero point move the right way with pot operation. This same setup will work with a single-ended output tube such as a 50L6, however, the voltage on a 50L6 is more like 8.5 volts; on a single-ended 6V6 or 7C5, you'll see around 13 volts. Also adjust the value of the fixed bias resistor up to compensate for the shunting of the reference leg---you don't want your power stage oinking up another 20-30 ma. beyond the design current (50 ma. for most beam tubes single-ended, 70-80 ma. two tubes push-pull AB1). You will also want to work out the left leg values so that the proper initial bias appears on the IF amplifier cathode. You need not be overly concerned with the cross-shunting through the meter----even with a 1 ma. meter, you are looking at 2% effect on the output circuit, and a 10% reduction in what is a negative feedback in the AVC setup---which generally is a desirable feature.

If you set things up so that the meter goes to full scale with less than maximum signal you want to handle, you can then tailor the sensitivity by adding some ohms in series with the meter, and do a little calibrating so that your meter reads signal strengths quite accurately. The slope of the IF cutoff as a function of antenna signal was used to calibrate the meter originally, so if you are using the original meter face on a replacement meter, it will work out to "calibrated very nicely, thank you" if the original manufacture had good calibration.

To protect your meter movement (and I recommend this for original setups as well as replacement) just hang a pair of 1N4005 diodes, parallel and in opposite directions, across the meter terminals. These will not shunt the meter until you have about 450 mv. across it, and will turn on hard at about 550, limiting current through the meter in a fault state to about 200% of full scale, which is quite adequate to protect the meter.

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Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
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From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Randy Zelick <h2rz@odin.cc.pdx.edu>
Subject: soldering aluminum
Message-ID: <Pine.PTX.3.91.970330053625.17091A-100000@odin.cc.pdx.edu>

HI Chuck,

I bought one of the products from the fellow you mentioned who solders beer cans at ham fests. In my case it was a low-temperature solder paste in a tube which was supposed to be far superior to regular solder for putting together coax connectors. Nice concept - you squeeze it around, heat the connector and everything flows perfectly.

Well I must say the stuff I got in my tube was close to useless. I tried it many times and finally went back to Kester. I then inquired amongst some fest-going buds and learned that the aluminum soldering does work kinda-sorta but requires exactly the equipment sold by the fellow (just that pencil torch, etc) and also requires skill and maybe the right substrate.

I won't say it doesn't work, but just a caution to be careful and not

have too high expectations.

Oh yes, I think the company is "solder-it", but I don't have a number or address.

Later,

=Randy=

R. Zelick
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503-725-3086, 503-725-3888 (fax)

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Allen Tucholski <allent@en.com>
Subject: Tek 547 Scope PARTS FS
Message-ID: <3.0.1.32.19970330102157.0088e590@en.com>

Hello,

I have a Tek 547 O-scope that has a problem in the vertical section, otherwise in real nice shape.
If you need any parts, or the CRT let me know.
Or if you want the scope, make me an offer.
Local pickup in Cleveland Ohio.

Allen

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Tom Clarke <fclarke@erols.com>
Subject: Timonium
Message-ID: <331DB785.7F49@erols.com>

Well, the beach umbrella should be easy to spot! I'll be in spot 39/41 with a blue van all gussied up with surfing/skating zaps thanks to my teenage son! Will have some stuff from other guys in the local club here in town....some Collins and maybe a SP-600 and a Heath SB200.
Looking forward to meeting some of the inhabitants of this fine net.

73, Tom W40KW/3

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: Trying to identify two military keys
Message-ID: <Pine.SUN.3.95.970329193943.27577B-100000@coyote.rain.org>

CJB-26001A: General use. 1/8-inch contacts. Nomenclature first
assigned 24 Feb 1932.
CAQZ-26026: For Navy Model MAR. Waterproofed. Nomenclature first
assigned 3 March 1945. (I have one or two of these,
myself.)

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Larry Godek <AZCOT@gnn.com>
Subject: tube 7htf3
Message-ID: <199703301429.JAA08159@mail-e2b.gnn.com>

I think someone on here this past week had one of these tubes,
7HTF3 and was wondering where they went. In reviewing my Pierson
KE-93 manual I see its a ballast tube in the filament line.

Hope this is the right number for the tube that was mentioned.

Larry Godek W00GH
AZCOT@gnn.com

Gilbert, AZ. 85233

Ex-W6KQL, W8BPV, DL5LS, K0TA0, KN6TUP

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Hadley Allhands <had@mail1.halcyon.com>
Subject: WFT:German RX Info
Message-ID: <Chameleon.4.01.2.970330071040.had@halcyon.com>

Hi Glowbugites,

Have a friend, not in the group, who is looking for information on the two
following

German receivers:

DEBEG-7201 (70 KHz to 30 MHz) probably made by Siemens

DEBEG TE-704A (1.5 MHz to 31 MHz) made by PRITZNER, Frankfurt/M FAX, USB Only.

If you know anything about these guys please send info to Ernie Beetz, WA7ATJ at ernest.beetz@faa.dot.gov

Thanks,
Hadley

Name: Hadley Allhands, K7MLR
E-mail: had@halcyon.com hadley@arva.com

From boatanchors@sco.theporch.com Sat Mar 29 20:44:11 1997
From: Keith Heitzmann <kk5fe@communique.net>
Subject: WTB: Hammarlund Speaker
Message-ID: <2.2.16.19970329145906.2f3797ac@mail.communique.net>

Hi all,
I am in need of a Hammarlund speaker like the S-100 or S-200. The front grill cloth must be good shape, but the case does not have to be in mint condition, I can paint it. Its going to used, its not for a museum. If anyone has one they can live without, let me now.
Please state price and condition via private email.
Thanks in advance,
Keith KK5FE

-----Keeper of all that I buy-----
-----AMI# 837-----
-----Visit my vintage Radio Web Site-----
-----<http://www.communique.net/~kk5fe>-----

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: jeffa@ix.netcom.com (Jeff Anderson)
Subject: WTB: SX-28 S-Meter (was Help! SX-28 Questions...)
Message-ID: <199703300259.UAA28531@dfw-ix5.ix.netcom.com>

Al Klase wrote:

>

> Exactly right! The SX-28 as well as the SX-24 and 25 use meters
>that rest on the right side when the power is off.

Thanks for solving the mystery, Al.

My meter rests on the *left* side when the power is off - some previous owner must have replaced the original meter movement with that of a conventional meter, and that's why it behaves so oddly.

Does anyone have an SX-28 S-Meter for sale or know of someone parting out a radio? (Perhaps I can use one from an SX-24 or SX-25...?)

Thanks,

- Jeff, WA6AHL

From boatanchors@sco.theporch.com Sun Mar 30 10:37:38 1997
From: Peter Ferrand <petef@sprynet.com>
Subject: Re: WTB: SX-28 S-Meter (was Help! SX-28 Questions...)
Message-ID: <3.0.32.19970329233700.006f2f7c@m3.sprynet.com>

At 03:01 AM 3/30/97 GMT, Jeff Anderson wrote:

>

> My meter rests on the *left* side when the power is off - some
>previous owner must have replaced the original meter movement with that
>of a conventional meter, and that's why it behaves so oddly.

>

Or just flip the whole meter so it hangs upside down.

(Generic advice - I haven't looked at an SX-28 in years)

-Pete
WB2QLL
petef@sprynet.com